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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/120,105	09/10/1993	ANDRÉAS WINTER	HOE92F294	1612

23416 7590 09/06/2002

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EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 09/06/2002

43

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/120,105

Applicant(s)

WINTER ET AL.

Examiner

D. R. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15,17-19,21,25 and 27-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15,17-19,21,25 and 27-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Status of Application

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/5/02 has been entered.

Response to Amendment

2. Applicant's amendment filed 8/5/02 (previously filed on and not entered) has been fully considered with the following results.
3. The amendment overcomes the previous objection to new matter and the objection is withdrawn. The examiner withdraws the statement made in the Advisory Action of 7/9/02 that he "--- did not find support for the amendment".
4. The rejections under 35 U.S.C. § 112, first and second paragraph are maintained as discussed below except for the second paragraph in regards to the deletion of the phrase "of R^a and R^b" in line 9 of Claim 17.
5. The amendment is not deemed to be persuasive in overcoming the rejection under 35 U.S.C. § 112, fourth paragraph, and the rejection is maintained for the reasons discussed below.
6. Applicant's willingness to file a terminal disclaimer to overcome the double patenting rejection is noted. However, as a terminal disclaimer has not been received the rejection is maintained.

Previously Cited Statutes

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action

Objection to New Matter

8. The amendments filed 1/27/02 are objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the

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disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

There is no basis in the specification as filed for determining melting ranges from a DSC spectrum using both heating and cooling, i.e., "heating/cooling rates of 20°C/min". The Examiner acknowledges that the specification teaches at page 14, "[m]elting points, peak widths, melting ranges and crystallization temperatures were determined by DSC spectrometry (heating/cooling rates of 20°C /min)." However, as this teaches how melting (heating) and crystallization (cooling) properties are measured it is not seen that the specification teaches that melting ranges are determined at heating/cooling rates of 20°C /min C..

9. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112, First Paragraph

10. ***Claims 15, 17-19, 21-25 and 27-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.***

11. First, the claims are rejected because of the new matter discussed in the preceding section.

12. Secondly, applicant depends on DSC characterization of the melting behavior of components of the blend, as well as that of the blend itself, in regards to both what is called "the peak in the melting range", "the half-intensity width of the the melting peak" and "the width determined at quarter peak height" in the melting point range. The specification never teaches what "the peak" references in melting ranges which are bimodal or polymodal, which by definition have more than one peak. Further, the crystallinity of both the components and the blend would be expected to be a function of the thermal history of the materials, yet the specification provides no data on thermal conditioning of the samples prior to measurement. (See for example the discussion in EP'189, especially page 5, line 29 to page 6, line 40, and page 9, lines 20-31, regarding thermal fusion data as a function of thermal history). Peak widths would also be expected to be a function of sample size and machine response. Thus, it is unclear what the precise melting ranges and peak widths of the instant claims represent. Additionally, there is no

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teaching as to how half widths and quarter widths are determined for melting peaks which are not completely resolved. It appears that the examples are typically unresolved, e.g., Examples 1-3 discuss shoulders, Example 4 has a double peak and Example 5 only reports a maximum. Applicant is relying on the melting behavior of the composition to define the invention being claimed and it is not seen that applicant has defined in a "full, clear, concise, and/or exact" manner the melting behavior as is required under 35 U.S.C. § 112, first paragraph.

13. In regards to the second aspect of this rejection, the Examiner does not agree that "the peak" would have been known to collectively refer to the peaks present in a multimodal DSC curve. To the degree that applicants have referred to ISO 3146 to support their argument, this has not been deemed to be persuasive. Applicant relies on the definition at 13.4 in ISO 3146 to support the argument that the peak in a bimodal or multimodal curve refers to the entire curve starting from when it leaves the baseline to the point where it returns. This is not deemed to be persuasive because it seems clear that what is being discussed at 13.4 is not a bimodal or polymodal curve. The figure referenced at 13.4 is not a bimodal or polymodal curve, and 13.4 also has the following note:

"A peak is attributable to the occurrence of some single process. It is normally characterized by a deviation from the established baseline, a maximum deflection, and a reestablishment of a baseline, not necessarily identical to that before the peak." (underlining added).

A bimodal or multimodal curve would clearly be representative of more than a single process, and thus would clearly be considered to contain more than one peak. It is interesting that applicant appears to acknowledge that the DSC curve could contain two clearly resolved peaks or nearly resolved peaks and concludes that "pure logic" then teaches that the width determined at half peak height, or quarter peak height is the sum of the peak widths at half or quarter peak heights. Why this would be more logical than including the distance between the peaks is not clear and what is called either "pure logic" or "unambiguous" is clearly a misnomer. Applicant is again referred to EP'189, especially page 6, lines 18-24, which deals with similar multimodal compositions, and specifically references the different peaks in the melting range and how peak widths for one of the peaks are measured in multimodal melting ranges. The latter is clearly different than what applicant considers to have been understood by those of ordinary skill in the art.

35 U.S.C. § 112, Second Paragraph, Rejection

14. **Claims 15, 17-19, 21-25 and 27-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

15. The language of Claim 17 is indefinite because:

- a. A bimodal or multimodal melting range would have more than one melting peak and it is indefinite as to which peak either "the peak" or "the melting peak" refers. Applicant's argument that "the peak" refers to the maximum in the melting peak range is not deemed to be persuasive because the specification provides no such teaching.
- b. The language is further indefinite because as noted above the crystallinity of both the components and the blend would be expected to be a function of the thermal history of the materials, yet the specification provides no data on thermal conditioning of the samples prior to measurement. It is noted that ISO 3146 at 17.2.2 supports the examiners position that the melting behavior is a function of the thermal history of the sample. It is not seen that because this is known that applicant has therefore erased the thermal history as set forth in ISO 3146, which is not cited as the test method used. Further, as set forth at 19 in ISO 3146 a number of variables should be set forth in reporting results including (e) previous thermal history of the sample and (f) conditioning.
- c. The "half-intensity width of the melting peak" and similarly, "the width at quarter peak height" are indefinite because it is unclear which peak is being referenced, or for multi-modal melting ranges how the peaks are resolved. Applicants argument that "---- a 'peak' has its boundaries where the curve touches the base line and has only one highest point or, in the rare case that there might exist two or more tips with the same height, they have the same height" is not deemed to be persuasive as there is no basis in the specification as filed for "the peak" being defined as the maximum in the melting range. Further, if applicant is arguing that bimodal and multimodal melting ranges are rare, which by definition would have two or more tips (peaks), then perhaps applicant wishes to narrow the claimed invention to those that don't have bimodal or

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multimodal melting ranges. That applicant would argue that any multiple tips would have equal heights is interesting.

d. The language is further indefinite because of the language "can be bimodal or multimodal", as it is unclear as to whether or not the melting range is bimodal or multimodal. It is pointed out that preceding this phrase it is already stated that the melting range is "broad, bimodal or multimodal".

e. The definition of R^3 and R^4 "--- where the substituents ---- form together with the atoms connecting them a ring" is indefinite, because it can't be told which atoms are connected together. Applicant has not further traversed the basis of the rejection which has previously been made.

Rejection Under 35 USC § 112, Fourth Paragraph

16. **Claim 32 is rejected under 35 U.S.C. 112, fourth paragraph, for not further specifying a limitation of the subject matter in the parent claim(s).** It is not seen that Claim 32 further limits the process of Claim 17 as the composition produced in Claim 17 is already characterized by a broad melting range. The basis of this rejection was stated in Detailed Action § 14 of the Office Action of 3/29/02 (paper No. 35). Applicant traverses the rejection arguing that Claim 32 limits the claim to a broad melting range, whereas Claim 17 requires a broad, bimodal or multimodal melting range. This is not deemed to be persuasive "broad" would include both bimodal and multimodal melting ranges. Note that the broad, bimodal or multimodal range are all defined by the same breadth of melting range as defined by peak widths. It remains that Claim 32 does not further limit the subject matter of Claim 17.

Obviousness Double Patenting

17. **Claims 15, 17-19, 21-25 and 27-32 "" rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 5,700,886 (Winter '886).** The basis of this rejection was stated in Detailed Action § 11 of the Office Action of 4/23/00 and has been further discussed in Detailed Action § 18 of the Office Action of 3/6/01. Applicant's has stated a willingness to file a terminal disclaimer when the other rejections are withdrawn. However, as a disclaimer has not been received the rejection is maintained.

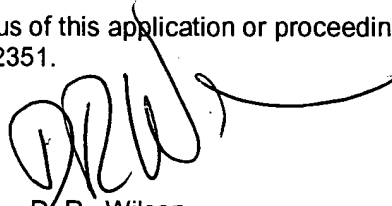
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Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. R. Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

A handwritten signature in black ink, appearing to read 'DRW', with a long horizontal flourish extending to the right.

D. R. Wilson
Primary Examiner
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